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ARCTIC INSTITUTE OF NORTH AMERICA
RESEARCH PROJECTS SUPPORTED BY CONTRACTUAL
ARRANGEMENT BETWEEN OFFICE OF NAVAL RESEARCH
AND ARCTIC INSTITUTE OF NORTH AMERICA.

CONTRACTS n7onr-367 and Nonr-342-00

SIXTH SEMIANNUAL PROGRESS REPORT.
1 July - 31 December 1952

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* Completed Project

PREFACE

This Semiannual Progress Report summarizes the status of all Arctic Institute-ONR Projects during the period 1 July - 31 December 1952. References to publications and reports, resulting from projects listed as completed in the last Semiannual Progress Report, appearing since the last report, are included even though the projects themselves are no longer current.

The following projects have been completed during the period 1 July - 1 December 1952 under Contract N7onr-367, Task Order I:

- | | |
|-------------------------------------|---|
| ONR-16
(Dr. Marie Hammer) | A Study of the Microfauna of Arctic Shore Areas (Coppermine and Hudson Bay, Canada). Part II. |
| ONR-19, 52
(Dr. Elmer Harp, Jr.) | An Archaeological Reconnaissance along the West Coast of Newfoundland with a View to Elucidating the Prehistoric Cultures of Newfoundland. |
| ONR-42
(Dr. Malcolm Brown) | A Study of the Peripheral Circulation in Acclimatized Eskimo Subjects on Southampton Island, Northwest Territories, Canada. |
| ONR-43
(Patrick D. Baird) | A Glaciological, Geological, and Biological Investigation of the River Clyde Region, Northeastern Baffin Island, Canada. |
| ONR-50
(Dr. Henry P. Hansen) | Pollen Analysis of Peat Sections Along the Alaska Highway. |
| ONR-65
(Dr. Felix G. Gustafson) | A Laboratory Analysis of Representative Plants from the Vicinity of Point Barrow, Alaska, with the View to Determining their Content of Vitamins, Including Ascorbic Acid, Thiamine, Riboflavin and Niacin. |
| ONR-68
(John D. Campbell) | A Paleobotanical-Stratigraphical Study of the "Muck" Deposits of the Klondike District, Yukon Territory, with the View to Collecting Evidence on Glacial and Postglacial Climatic Sequence. |

CONTRACT N7onr-367, TASK ORDER I

Project: A Study of the Ethnological and Physical Anthropologies
ONR-11 of Eskimos in the region between Norton Sound and the
Alaskan Peninsula.

Investigator: Dr. Helge Larsen
Etnografisk Samling
Nationalmuseet
10 Ny Vestergade
Kobenhavn, Denmark

Amount
from AINA: \$2610.

Date initiated: 1948.

Anticipated
completion date: Spring 1953.

Status: Technical report is in process of preparation.

Project: A Cooperative Study to Determine the Development
ONR-14 Sequence in Human Culture, Vegetation, etc. in Yukon
Territory, Canada.

Investigator: Professor Hugh M. Raup
Director, Harvard Forest
Harvard University
Petersham, Massachusetts

(Cooperative project with Dr. Frederick Johnson.)

Amount from
AINA: \$2610.

Date initiated: 1948.

Anticipated
completion date: Spring 1953.

Status: Technical report is in process of preparation.

Project: A Study of the Microfauna of Arctic Shore Areas.
ONR-16 (Coppermine and Hudson Bay, Canada.)

Investigator: Dr. Marie Hammer
Strodam, Hillerod,
Denmark

Amount
from AINA: \$2610.

Status: Completed.

Part I completed and publication noted.

Part II - manuscript in process of review.

The following publication has appeared in addition to those previously noted:

Hammer, Marie. A New Oribatid (Acarina) from Rocky Mountains. Appeared in "Entomologiske Meddelelser", Vol. XXVI 1952. Separates forwarded ONR-Washington, ONR-New York and Nav. Res. Lab., 19 January 1953.

Project: An Archaeological reconnaissance along the West Coast
ONR-19, 52 of Newfoundland with a view to Elucidating the Pre-
historic Cultures of Newfoundland.

Investigator: Elmer Harp, Jr.
Dartmouth College Museum
Hanover, New Hampshire

Amount
from AINA: \$1200. (ONR-19)
\$1400. (ONR-52)

Date initiated: 1949 (ONR-19)
1950 (ONR-52)

Status: Completed.

The following report has been prepared:

Harp, Elmer Jr. The Cultural Affinities of the
Newfoundland Dorset Eskimo. Technical report.
(Manuscript copies forwarded ONR-Washington (2)
and ONR-New York (1), 22 December 1952).

Project: A Study of the Fur Seals of the Pribilof Islands
ONR-24 (Alaska) with Special Reference to the Behavior
and Methods of Age Determination of Seals and the
Utilization of the Carcasses.

Investigator: Dr. G. C. L. Bertram
Director, Scott Polar Research Institute
Cambridge, England

Amount
from AINA: \$2500.

Date initiated: 1949.

Anticipated
completion date: Winter 1952.

Status: Laboratory work is proceeding at Cambridge, England.

The following publication has appeared in addition
to those previously noted:

Harrison, R. J. and Roberts, J. M. Reproduction in
Some Pinnipedia. Trans. Zool. Soc. London., Vol.
XXVII, Part 5, October 1952, pp. 437-540.

Project: A Waterfowl Nesting Survey of Ungava Peninsula with
ONR-26 Particular Reference to the Black Duck.

Investigator: Carl R. Eklund
Fort Washington, Maryland

Amount
from AINA: \$2500.

Date initiated: 1949.

Status: Completed.

The following report has been prepared in addition
to those previously noted:

Eklund, Carl R. A Waterfowl Survey of the Ungava
Peninsula with on Other Birds and Mammals.
Technical Report. (Copies forwarded ONR-Washington
and New York, 15 August 1952).

Project: A Faunistic and Ecological Exploration of the Lepidoptera,
ONR-29 Diptera, and Hymenoptera of Newfoundland.

Investigator: Dr. Harry V. Krogerus
Mannersheimvagen 25A
Helsinki, Finland

(Cooperative project with Drs. Lindroth, ONR-30;
Palmen, ONR-33; and Tuomikoski, ONR-35.)

Amount
from AINA: \$1625.

Date initiated: 1949.

Anticipated
completion date: Spring 1953.

Status: Work has continued on the manuscript on the
Macrolepidoptera of Newfoundland and the first
part is nearing completion.

The determination of the Microlepidoptera of New-
foundland collected in 1949 has been continued.

Project: A Faunistic and Ecological Exploration of the Coleoptera
ONR-30 (especially the Carabidae) of Newfoundland.

Investigator: Dr. Carl H. Lindroth
Zoological Institute
Lund, Sweden

(Cooperative project with Drs. Krogerus, ONR-29;
Palmen, ONR-33; and Tuomikoski, ONR-35.)

Amount
from AINA: \$1625.

Date initiated: 1949.

Anticipated
completion date: Spring 1953.

Status: Technical report on the Newfoundland Carabid
Fauna is in course of preparation.

Project: A Faunistic and Ecological Exploration of the Diplopoda,
ONR-33 Chilopoda, Isopoda terrestria, and in Part of the
Phytophagous Coleoptera (Chrysomelidae, Curculionidae)
of Newfoundland.

Investigator: Dr. Ernst P. Palmen
Zoological Institute
University of Helsinki
Helsinki, Finland

Amount
from AINA: \$1625.

Date initiated: 1949.

Anticipated
completion date: Summer 1953.

Status: Technical report is in process of preparation

The following publication has appeared:

Palmen, Ernst. Survey of the Diplopoda of
Newfoundland. Appeared in Ann. Zool. Soc. "Vanamo",
Vol. 15, No. 1, 1952. (Separates forwarded ONR-
Washington, New York and Nav. Res. Lab., 28 July 1952.)

Project: A Waterfowl Survey of the Perry River Area of Northern
ONR-34 Canada.

Investigator: Paul Queneau, Peter M. Scott, Harold C. Hanson
c/o Paul Queneau
1 St. John Place
Westport, Connecticut

Amount
from AINA: \$2500.

Date initiated: 1949.

Anticipated
completion date: Summer 1953.

Status: Technical report is in process of preparation.

Project: A Floristic and Ecological Exploration of the Bryophyta
ONR-35 of Newfoundland.

Investigator: Dr. Risto K. Tuomikoski
Botanical Institute
University of Helsinki
Unionink. 44
Helsinki, Finland

Amount
from AINA: \$1625.

Date initiated: 1949.

Anticipated
completion date: Summer 1953.

Status: Technical report in progress.

Project: A Study of the Economic Geography of the Fort Yukon Area.
ONR-37

Investigator: Dr. Demitri B. Shimkin
Russian Research Center
Harvard University
Cambridge, Massachusetts

Amount
from AINA: \$1200.

Date initiated: 1949.

Anticipated
completion date: Spring 1953.

Status: Technical report is in process of preparation.

Project: A Study of the Peripheral Circulation in Acclimatized
ONR-42 Eskimo Subjects on Southampton Island, Northwest
Territories, Canada.

Investigator: Dr. Malcolm Brown
Kingston General Hospital
Kingston, Ontario, Canada

Amount from
AINA: \$500.

Date initiated: 1949.

Status: Completed.

The following technical report has been prepared:

Brown, Malcolm; Hatcher, J. D.; Page, John.
The Effect of Chronic Exposure to the Cold on
the Temperature and Blood Flow of the Forearm.
Technical report. (Copies forwarded ONR-Washington
and New York, 19 August 1952.)

Project: A Glaciological, Geological, and Biological Investiga-
ONR-43 tion of the River Clyde Region, Northeastern Baffin
Island, Canada.

Investigator: Patrick D. Baird
Arctic Institute of North America
3485 University Street
Montreal, Quebec, Canada

Amount
from AINA: \$8000.

Date initiated: 1950.

Status: Completed.

Technical report has been prepared; manuscript received
and was in review at close of year.

Project: Field Population Studies of Ranunculus Species
ONR-44 Occuring in Northern Alaska.

Investigator: Prof. Lyman D. Benson
Department of Botany
Pomona College
Claremont, California

Amount
from AINA: \$500.

Date initiated: 1950.

Anticipated
completion date: Spring 1953.

Status: Technical report is in process of preparation.

Project: A Study of the Language of the Nuniwagamuit Eskimo at
ONR-49 Nunivak Island, Alaska.

Investigator: Prof. Louis L. Hammerich
University of Copenhagen
Frue Plads
Copenhagen, Denmark

Amount
from AINA: \$2500.

Date Initiated: 1950.

Anticipated
completion date: Spring 1953.

Status: A systematic comparison of the vocabulary collected on Nunivak has been made with that of the other Eskimo dialects, i.e., a survey of the etymology, stating (1) the common Eskimo words, (2) the words common to Nunivak and the mainland dialect of South Western Eskimo, (3) words found only in the dialect of Nunivak.

Project: Pollen Analysis of Peat Sections along the Alaska Highway.
ONR-50

Investigator: Prof. Henry P. Hansen
Dean, Graduate School
Oregon State College
Corvallis, Oregon

Amount
from AINA: \$500.

Date initiated: 1950.

Status: Completed.

The following technical report has been prepared:

Hansen, Henry P. Post Glacial Forests in Yukon Territory and Alaska. Technical report. (Copies forwarded ONR-Washington and New York, 22 August 1952.)

Project: A Study of the Hooded Seals in the Newfoundland-
ONR-53 Labrador-Greenland Region.

Investigator: Per Host
Norsk Kulturfilm
Solplassen 1
Oslo, Norway

Amount
from AINA: \$2500.

Date initiated: 1950.

Anticipated
completion date: Spring 1953.

Status: Technical report is in process of preparation.

Project: A Study of the Recent Glacier History of Glacier Bay,
ONR-56 Alaska, and of the Development of Vegetation on
Deglaciaded Terrain, with Special Reference to the
Importance in the Succession.

Investigator: Prof. Donald B. Lawrence
Department of Botany
University of Minnesota
Minneapolis, Minnesota

Amount
from AINA: \$1000.

Date initiated: 1950.

Anticipated
completion date: Fall 1953.

Status: Awaiting analysis of wood samples from seven fossil
trees for radio carbon age determination by Dr.
Edward S. Deevey, Jr., Director of the Geochronometric
Laboratory at Yale University. Additional data was
collected during 1952 in the Juneau and Glacier Bay
area.

Project: An Archaeological Survey from the South Mouth of the
ONR-59 Yukon River, Alaska, to Hazen Bay, with the Excavation
of the Most Promising Site Located by this Survey.

Investigator: Wendell H. Oswalt
University of Alaska
College, Alaska

Amount
from AINA: \$900.

Date initiated: 1950.

Status: Completed.

The following publication has appeared in addition
to those previously noted:

Oswalt, Wendell H. Pottery from Hooper Bay Village,
Alaska. Published in American Antiquity, Vol. 18,
No. 1, July, 1952. (Separates forwarded to ONR-
Washington and New York, and Nav. Res. Lab., 4 Nov-
ember 1952.)

Project: A Laboratory Analysis of Representative Plants from
ONR-65 the Vicinity of Point Barrow, Alaska, with the View
to Determining their Content of Vitamins, Including
Ascorbic Acid, Thimaine, Riboflavin and Niacin.

Investigator: Dr. Felix G. Gustafson
Department of Botany
University of Michigan
Ann Arbor, Michigan

Amount
from AINA: \$2000.

Date initiated: 1951.

Status: Completed.

The following report has been prepared:

Gustafson, Felix G. A Study of the Riboflavin,
Thiamine, Niacin and Ascorbic Acid Content of Plants
in Northern Alaska. Technical report. (Copies
forwarded ONR-Washington and New York, 22 August 1952).

Project: An Ecological and Distributional Study of Vertebrates
ONR-66 and Invertebrates of Ungava-Labrador.

Investigator: Dale J. Osborn
Department of Zoology
McGill University
Montreal, Quebec, Canada

Amount
from AINA: \$1300.

Date initiated: 1951.

Anticipated
completion date: Spring 1953.

Status: Technical report is in process of preparation.

Project: A Geographical-Geological Study of Lake George and
ONR-67 Other Ice-dammed Lakes of Alaska, with the View to
Determining their Physical Characteristics and
Cultural Significance.

Investigator: Dr. Kirk H. Stone
Department of Geography
University of Wisconsin
Madison, Wisconsin

Amount
from AINA: \$2440.

Date initiated: 1951.

Anticipated
completion date: Spring 1953.

Status: The base map of Lake George was checked, comparative observations and notes taken on an airplane flight in September. A few observations were made at reservoirs.

There appear to have been strong correspondences between 1952 and 1951 observations re the dumping date, the pre- and post-dumping shorelines, and the characteristics of the gorge of Lake George. These subjective observations, coupled with previous objective analyses, have led to the hypothesis that we may expect the periodic dumping of Lake George to continue for some time. The hypothesis is worthy of being tested.

Project: A Paleobotanical-Stratigraphical Study of the "Muck"
ONR-68 Deposits of the Klondike District, Yukon Territory,
with the View to Collecting Evidence on Glacial and
Postglacial Climatic Sequences.

Investigator: John D. Campbell
Department of Botany
McGill University
Montreal, Quebec, Canada

Amount
from AINA: \$1500.

Date initiated: 1951.

Status: Completed.

The following technical report has been prepared:

Campbell, John D. The Palaeobotany and Stratigraphic
Sequence of the Pleistocene Klondike "Muck" Deposits.
(Manuscript copies forwarded ONR-Washington and New
York, 24 November 1952.)

Project: An Archaeological Study of Mill Island, Hudson Strait,
ONR-69 Including Detailed Excavation of a Pure Cape Dorset
Eskimo House Site.

Investigator: Dr. Deric O'Bryan
Arctic, Desert and Tropic
Information Center
Research Studies Institute
Maxwell Air Force Base, Alabama

Amount
from AINA: \$2400.

Date initiated: 1951.

Anticipated
completion date: Spring 1953.

Status: Technical report is in process of preparation.

Chapters II (Geology) and IV (Botany) have been completed. Chapter VI (Archeology) is in the second draft. Three intermediate chapters are in the first draft.

The following major conclusions may be drawn:

Mill Island has often been visited, but inhabited only for a few consecutive years by two families of Cape Dorset Eskimo - over 1,000 years ago.

Mill Island is composed entirely of pre-Cambrian rocks. The occasional sedimentary erratics appear to have been glacially transported south from Foxe Peninsula.

Mill Island once supported a small herd of caribou which apparently was exterminated by the Cape Dorset Eskimo.

The Cape Dorset Eskimo site on Mill Island was occupied near the close of the Cape Dorset period of Eskimo pre-history. The occupants had some knowledge of or contact with Eskimo bearers of the succeeding Thule culture.

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Project: ONR-70 An Archaeological Reconnaissance of the Brooks Range, Alaska, with the View to Locating Archaeological Sites Containing Implements of the Denbigh Flint Complex.

Investigator: William Irving
University of Alaska
College, Alaska

Amount
from AINA: \$1000.

Date initiated: 1951.

Anticipated
completion date: Spring 1953.

Status: In 1951, evidence was found that the Brooks Range has supported a variety of aboriginal people over a long period of time. Some of the material collected is related to the early flint industries. The collection has been catalogued, described and photographed. Analysis of the material and comparison, by means of current literature, with other collections indicates that one of the sites is typologically intermediate between the Denbigh Flint Complex and a later horizon represented by Ipiutak. The nature of this relationship and the significance of the geography of the mountain region to the study of arctic archeology will be the principal subjects of the technical report. Final comparative work and preparation of the manuscript are in preparation.

Project: A Botanical Survey of Ungava-Labrador between the
ONR-71 Mouth of the Korok River and the Torngat Mountains.

Investigator: Dr. Jacques Rousseau
Montreal Botanical Garden
4101 Sherbrooke Street E.
Montreal, Quebec, Canada

Amount
from AINA: \$1300.

Date initiated: 1951.

Anticipated
completion date: Spring 1953.

Status: The territory surveyed included Adloylik Fiord, the
Korok River from its mouth to its source in the Torngat
mountains, Saglek Pass, and Chubb Crater. Botanical
specimens included: Phanerogams, ferns, mosses, lichens,
diatoms, desmids and soil bacteria. Ecological and
phytogeographical data were obtained. It was noted that
the flora of Chubb Crater was particularly poor and,
with Adloylik Fiord, belongs to the Arctic zone; that
Korok River is a more or less forest oasis surrounded by
Arctic territory, and is in a zone referred to by the
investigator as the "Hemiarctic" Zone. Some Ethnological
data was gathered. Zoology notes included: distribution
of fish, collection of insects and spiders for specialists,
and food habits of lemmings. Analysis of the specimens
is proceeding in various laboratories.

Project: An Ecological Study of Fresh Water Algae of Arctic
ONR-72 and Subarctic Alaska.

Investigator: Dr. Hannah T. Croasdale
Department of Zoology
Dartmouth College
Hanover, New Hampshire

Amount
from AINA: \$2000.

Date initiated: 1951.

Anticipated
completion date: Spring 1954.

Status: The examination of specimens collected in 1951 has
continued. About fifty per cent of the mosses
collected have been worked over and found very
interesting by Dr. W. C. Steere of Stanford.

A smaller proportion of the algal material has been
identified. Work has continued on a bibliography of
Arctic and Subarctic algae.

Project: A Geological Study of Canyon Fiord, Ellesmere Island.
ONR-73

Investigator: Dr. Johannes C. Troelsen
Universitetets Mineralogiske Museum
Ostervoldgade 7
Copenhagen K, Denmark

Amount
from AINA: \$1000.

Date initiated: Summer 1952.

Status: During 1952, one trip was made across Forsheim Peninsula to cache food and supplies and a second trip was made around the coast of the peninsula. The project has particular reference to the geological history of the Franklinian Geosyncline.

The following report has been prepared:

Troelson, J. C. Geological Investigations in Ellesmere Island, 1952. Progress report. (Copies forwarded ONR-Washington and New York, 2 December 1952.)

Project: The Blue Goose, Life History, Ecology and Management.
ONR-75

Investigator: Mr. F. Graham Cooch
Department of Conservation
Cornell University
Ithaca, New York

Amount
from AINA: \$2000.

Date initiated: Summer 1952.

Status: Field investigations were conducted at Southampton Island breeding colony. The 1952 breeding season was one of the earliest on record. One study area of 250 acres yielded 567 nests. These nests gave incubation data and control for subsequent other studies. An attempt was made to correlate the percentage of Blue, Lesser Snow and mixed nests according to the Hardy-Weinberg law. Behavior studies indicated that random mating was a general rule. A sample of nearly 3,000 nests were studied in an attempt to determine the relative clutch sizes of the two species and their subsequent mixed matings. The original plan for banding a large supply of breeding birds was successful. Over a 10 day period, a total of 5,000 Blue and Snow geese were banded. This was 20% of the total number of birds trapped. About 4,000 were in the downy young stage. In 1953, it is hoped to obtain some evidence of the percentage of those which breed in their second year --an important determination from the management viewpoint. The experiment has been set up and duplication should proceed for two more years. The data is in process of analysis.

Project: Growth Rates of Marine Invertebrates as a Function
ONR-76 of Latitude.

Investigator: Mr. Paul A. Dehnel
Department of Zoology
University of California
Los Angeles, California

Amount
from AINA: \$1500.

Date initiated: Summer 1952.

Status: The following report has been prepared:

Dehnel, Paul A. A Study of Growth Rates in Selected
Marine Invertebrates as a Function of Temperature.
(Manuscript copies forwarded ONR-Washington and New
York, 22 December 1952.)

Project: The Life History of the Pacific Walrus.
ONR-77

Investigator: Mr. Francis H. Fay
Department of Zoology
University of British Columbia
Vancouver, B. C. Canada

Amount
from AINA: \$1500.

Date initiated: Summer 1952.

Status: The following report has been prepared:

Fay, Francis H. The Life History of the Pacific
Walrus. (Manuscript copies forwarded ONR-Washington
and New York, 22 December 1952.)

Project: Adoption of Sheep Farming by Greenlandic Seal Hunters.
ONR-78

Investigator: Miss Marjorie C. Findlay
Kauppakatu 23
Kajaani, Finland

Amount
from AINA: \$1200.

Date initiated: Summer 1952.

Status: This project is an investigation of the adoption of sheep farming and horticulture by the seal hunting Eskimos on the southwest coast of Greenland, with a view to elucidating aspects of culture contact and culture change. At the end of the year, the grantee had returned to England from Greenland. She reports the work was richly rewarding although conditions for research were difficult.

Project: Pleistocene and Postglacial Forests in Alaska and
ONR-79 Western Canada.

Investigator: Dean Henry P. Hansen
Graduate School
Oregon State College
Corvallis, Oregon

Amount
from AINA: \$500.

Date initiated: Summer 1952.

Status: A pollen analysis of peat and mulch deposits is planned to determine record of Pleistocene and post-glacial forests, in order to interpret climate and forest migrations.

Clean-cut peat sections were obtained from 12 sites of organic sedimentation along Hart Highway, in British Columbia. All sections extended down to the underlying sand and gravel, and a complete record of the adjacent forests, since the initiation of sedimentation, is present.

Sections 1,3,4 and 5 westward from Dawson Creek were taken from muskeg type deposits, formed on flat terrain and with no evidence that there was an original depression with standing water. Sections 1 to 5 lie east of Rockies and the muskegs supported Larix laricina, which is probably the southwest limits of this species range. No tamarack was noted on the other deposits. A layer of frost was encountered on section 1.

All of the bogs and muskegs support one or more species of Sphagnum. Other plants common on most of the sites include Picea mariana, Ledum groenlandicum, Betula glandulosa, Kalmia polifolia, Andromeda polifolia, Potentilla palustris, Menyanthes trifoliata, Vaccinium oxycoccus, V. uliginosum, V. vitis-idaea, Drosera sp., Eriophorum sp., Carex spp., and Salix spp. Other plants present but not on all sites include Picea glauca, Pinus contorta latifolia, Betula papyrifera, Cornus canadensis, Alnus sp., and Rubus chamaemorus. The peat samples are being processed and microscopic slides of the material made for microscopic analysis.

Project: The Arctic and Subarctic Muscidae of North America.
ONR-80

Investigator: Mr. Hugh C. Hockett
Long Island Vegetable Research Farm
Riverhead, New York

Amount
from AINA: \$1700.

Status: It is proposed to assemble and classify the flies belonging to the muscid fauna in the Arctic and Subarctic regions of North America which have accumulated in the collection of the National Museum in Washington and in the National Collection in Ottawa.

A check list of the species of Muscidae occurring in the Arctic, Subarctic and neighbouring regions of North America was prepared during the past few months.

A careful examination of much of the entomological literature pertinent to the immediate study has been attempted. Advantage has been taken of the records and notes of species in collections at home and abroad examined by the investigator during the past twenty-five years.

It has been considered advisable, at least at the beginning of the project, to broaden the geographical limitations of the study to include such bordering areas as Eastern Siberia on the West, the southern coastal strip of Alaska, the southern region of Hudson Bay, the Labrador coast, and the islands off the eastern coast of Greenland, namely Iceland, Jan Mayer Island, and Spitsbergen, largely owing to the paucity of material available to this worker for study, from the neighbouring or contiguous areas of the Arctic and Subarctic regions of North America, and also owing to the probability that many of the forms occurring in these extralimital areas will eventually be found to occur as intrusions, on occasion, into the more northern regions of North America.

Project: Summer Behavior and Ecology of Certain Sea-ducks.
ONR-81

Investigator: Philip S. Humphrey
University of Michigan
Museum of Zoology
Ann Arbor, Michigan

Amount
from AINA: \$1800.

Date initiated: 1952.

Status: Manuscripts on three papers concerning behavior
of birds noted in Hooper and Iziak Bays, Alaska,
are in course of preparation.

The following report has been prepared:

Humphrey, Philip S. Summer Behavior and Ecology
of Certain Sea-Ducks. Technical report. (Copies
forwarded ONR-Washington and New York, 25 September
1952.)

Project: Aleutian Anthropology.
ONR-82

Investigator: Dr. William S. Laughlin
Department of Anthropology
University of Oregon
Eugene, Oregon

Amount
from AINA: \$3000.

Date initiated: Summer 1952.

Status: The following report has been prepared:

Laughlin, William S. Aleutian Report 1952.
Manuscript copies forwarded ONR-Washington
and New York, 23 December 1952.

Project: Botanical Researches in James Bay, Canada.
ONR-83

Investigator: Rev. Ernest Lepage
Ecole d'Agriculture
Rimouski, P. Q., Canada

Amount
from AINA: \$600.

Date initiated: Summer 1952.

Status: Objective is a botanical inventory to find new entities in the vascular and invascular flora and to determine the range of known plants in the region of Albany River and adjacent coast of James Bay.

The following report has been prepared:

Lepage, Rev. Ernest. Botanical Researches in James Bay. Progress report. (Manuscript copies forwarded ONR-Washington and New York, 22 December 1952)

Project: Studies on the Non-material Culture of the Noatak
ONR-85 Eskimo.

Investigator: Charles V. Lucier
Box 37
College, Alaska

Amount
from AINA: \$1250.

Date initiated: Summer 1952.

Status: Ethnological notes were taken during the summer in
the vicinity of Kotzebue, Alaska. The following
conclusions may be drawn:

- (1) The present Noatak population is composed primarily of two distinct ethnic groups, now in the process of fusion and adjustment to Western technical civilization. One group, the Napaktomiut, are characterized by a dual adaptation to the wooded, lower river country and to the sea. The other, the Noatagmiut, are inhabitants of the more-or-less barren inland regions, and formerly had no settled place of residence but followed the caribou herds throughout most of the year.
- (2) The Napaktomiut appear to be most closely allied culturally to the Kotzebue Eskimo, and secondarily, to the other Eskimo in general who occupy an arctic woodlands environment in Alaska. Noatagmiut cultural affinities are most likely to exist with the almost-obliterated inland Eskimo of Alaska. The Noatagmiut themselves state that the Upper Colville Eskimo are their closest relatives, biologically and linguistically.

Project: Glaciological Research in Alaska.
ONR-86

Investigator: Maynard M. Miller
77 Holbrook Road
Cambridge, England

Amount
from AINA: \$700.

Date initiated: Summer 1952.

Status: Miller, Maynard M. Special Investigations on the
Juneau Ice Field, August-September, 1952. Progress
Report. (Copies forwarded ONR-Washington and New
York, 22 December 1952).

Miller, Maynard M. A Method of Bottom Sediment
Sampling in Glacial Lakes. Prepublication manuscript
to be submitted to Journal of Glaciology. (Copies
forwarded ONR-Washington and New York, 22 December
1952)

Project: A Floristic Survey of Northwestern Ontario.
ONR-87

Investigator: David R. Moir
Department of Botany
University of Minnesota
Minneapolis, Minnesota

Amount
from AINA: \$1500.

Date initiated: Summer 1952.

Status: In July, base camps were established at intervals of 25-40 miles along the Fawn River and the party worked into the interior. Specimens of all of the highest plants were collected in sets of at least five specimens of each species. Observations were made on the nature of the terrain, glacial features, and other related data.

In August the party arrived at the mouth of the Severn River. Representative beach ridges between the coast and a point about 20 miles to the interior were examined and plant specimens were collected.

Project: Archaeological Reconnaissance of Nunivak Island,
ONR-88 Alaska.

Investigator: James W. Van Stone
Department of Anthropology
University of Alaska
College, Alaska

Amount
from AINA: \$1500.

Date initiated: Summer 1952.

Status: During the summer of 1952 tests were made of all shores of Nunivak Island (except the west side), in order that the most promising ones may be selected for complete excavation. It appears that future work on Nunivak Island should be undertaken at the Tachikamuit site near Cape Mendenhall. This site contains a contact and a pre-contact level and offers fair preservation. A good collection of late pottery was obtained which should afford interesting comparisons with those of the same age from the adjacent mainland. An extensive collection of driftwood borings was made, which will be measured and compared with mainland river chronologies.

Project: A Study of the Lower Course of the Saskatchewan
ONR-89 Glacier, Alberta, Canada.

Investigator: Robert P. Sharp
California Institute of Technology
Pasadena 4, California

Amount
from AINA: \$1500.

Date initiated: Summer 1952.

Status: A thorough study is planned of the lower course of
the glacier as to its physical condition, rate and
mode of flowage and nature and origin of structures
in the ice produced by flowage.

The following report has been prepared:

Sharp, Robert P. Glaciological Studies on Malaspina
Glacier, Alaska, and Saskatchewan Glacier, Alberta,
Canada. (Copies forwarded ONR-Washington and New
York, 21 November 1952).

CONTRACT N7onr-367, TASK ORDER II

Project: ONR-T.O. 2a Compilation of a Comprehensive Annotated Bibliography on the Arctic.

Investigator: Arctic Institute of North America
(Project Director: Marie Tremaine)

Amount from AINA: (Task Order II)

Anticipated completion date: For printing basic volumes, June 1953.

Status: From material analyzed in the previous four years, over 20,000 items were delivered to the printer in June 1951. Galley-proof reading of this material, estimated to cover 5 volumes, has been completed and corrected galley proofs have been returned. Page-proof reading has been started.

Research work has continued on the 1951-1953 Supplement to the above basic volumes. It is anticipated that sufficient material will be available in June, 1953, for printing 2 supplemental volumes.

CONTRACT Nonr-342-00

Project: A Reconnaissance Oceanographic Investigation in the
Nonr-342-00 Coastal Waters of Labrador.

Investigator: Commander David C. Nutt (USNR)
Arctic Specialist
Dartmouth College
Hanover, New Hampshire

Amount
from AINA: (Contract Nonr-342-00)

Date initiated: 1951.

Anticipated
completion date: Spring 1953.

Status: From June 22 to September 6, operations were carried
out along the Labrador Coast with particular emphasis
on the Hamilton Inlet - Lake Melville Estuary and the
area from Nani to Saglek. Plotting and analysis of
data have been continued.

In October, a collection of 1,925 fishes from Blue
Dolphin Labrador Expeditions of the past several
years was deposited in the U. S. National Museum.

The following report has been forwarded by the inves-
tigator directly to the Geophysics Branch, ONR:

Nutt, David C. Summary of Oceanographic Research in
Labrador, 1952. Technical report.

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